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10/669,155	09/23/2003	Martin A. Cohen	884.0207USU	1663

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EXAMINER

RALIS, STEPHEN J

ART UNIT	PAPER NUMBER
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3742

MAIL DATE	DELIVERY MODE
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01/24/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/669,155	Applicant(s) COHEN ET AL.	
	Examiner Stephen J. Ralis	Art Unit 3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-20, 82 and 83 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-20, 82 and 83 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 and 30 April 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Applicant is respectfully requested to provide a location within the disclosure to support any further amendments to the claims.

Response to Amendment/Arguments

3. Applicant's arguments filed 01 November 2007 have been fully considered but they are not persuasive.

Oath/Declaration

4. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not state that the person making the oath or declaration acknowledges the duty to disclose to the Office all information known to the person to be material to patentability as defined in 37 CFR 1.56.

The "duty to disclose" statement is incorrect. The statement should read –I acknowledge the duty to disclose information which is material to patentability of this application in accordance with Title 37, Code of Federal Regulations Section 1.56. –.

A new oath or declaration with the correct "duty to disclose" statement in compliance with 37 CFR 1.67(a) is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-10 and 12-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 1 recites the

broad recitation "one or more input selectors", and the claim also recites "at least one of said input selectors" which is the narrower statement of the range/limitation.

8. Applicant is queried with respect to the difference between "one or more input selectors" and "at least one of said input selectors". Applicant is claiming "one or more input selectors" and further recites "at least one of said input selectors". It is not clear to whether the "at least one of said input selectors" is one of the "one or more input selectors" or whether the recitation to the "at least one of said input selectors" is each an independent one of the "one or more input selectors".

Joint Inventors – Common Ownership Presumed

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. Claims 1-4, 6-9 and 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakao et al. (Japanese Publication No. JP 09164300A) in view of Wellcome (United Kingdom Patent Application No. GB2163574A).

Nakao et al. disclose a controller (printed circuit board 28; and Drawing 1) for use with a fabric grooming device (cordless iron 2) comprising: an interactive user interface having one or more input selectors (setup key 29/ switch 11 combination; English MAT; page 4, lines 6-11), one or more output indicators (set temperature; temperature level; buzzer 14), and a digital display panel (liquid crystal display [LCD] 13) for displaying scrolled text and segmented text; wherein the interface is operatively connected to a microprocessor (10), wherein the interface is integrated onto the a handle of the fabric grooming device (see Drawing 2); and at least one of the input selectors being a temperature setting selector (setup key 29/ switch 11 combination; English MAT; page 4, lines 6-11).

With respect to the limitation of a digital display panel for displaying scrolled text and segmented text, Nakao et al. disclose the liquid crystal display (13) for displaying set temperature and the temperature level which would be inherently segmented text/numbers. In addition, it has been held that the recitation that an element is “for” performing a function is not a positive limitation but only requires the claimed structural limitations and the ability to so perform as such. Nakao et al. clearly disclose a liquid crystal display (13) for displaying set temperature and the temperature level and would have the ability to display both scrolled and segmented text/numbers. Therefore since Nakao et al. disclose the structural limitations of a controller (printed circuit board 28; and Drawing 1) and a digital display panel (liquid crystal display [LCD] 13) for displaying segmented text/numbers due to LCD displays are very interactive and programmable, Nakao et al. fully meets “a digital display panel for displaying scrolled text and segmented text” given its broadest reasonable interpretation

With respect to the limitations of claims 8 and 9 and at least one of said one or more output indicators being a display panel, specifically an LCD panel, Nakao et al. explicitly disclose the indicating means being a liquid crystal display (13) for displaying set temperature and the temperature level mounted on the iron (English MAT; page 1, Solution) and a liquid crystal display for displaying set temperature and the temperature level inherently has a display panel for each output.

With respect to the limitations of claim 12 and one or more output indicators being a visual indicator, Nakao et al. explicitly disclose an indicating liquid crystal

display (13) for displaying set temperature and the temperature level mounted on the iron (English MAT; page 1, Solution).

With respect to the limitations of claims 13, 14 and 17 and one or more output indicators being an audible indicator, tactile indicator and the microprocessor being operatively connected to a vibrator, Nakao et al. explicitly disclose an output indicator (buzzer 14) being connected to the microprocessor (10). The buzzer clearly makes an audible indication of an event and the examiner notes that a buzzer would inherently create a vibration sensitive to touch or tactile indication of the buzzer when activated. Therefore, Nakao et al. fully meets "wherein said one or more output indicators are a tactile indicator" and "wherein said microprocessor is operatively connected to a vibrator" given its broadest reasonable interpretation.

With respect to the limitations of claim 15 and the microprocessor being operatively connected to a sound generator, one or more sensors, and/or a heater, Nakao et al. explicitly disclose a schematic circuit (see Drawing 1) comprising microprocessor (10) operatively connected to a temperature sensor/thermistor (15), buzzer (14) and heater (7).

With respect to the limitations of claims 16 and microprocessor is also operatively connected to a timer, Nakao et al. explicitly disclose the microprocessor (10) comprising detection means (pause detection means 16) that will start an internal timer... (English MAT; page 5, paragraph 17).

Nakao et al. disclose all of the limitations of the claimed invention, as previously set forth, except for at least one of the input selectors being a fabric setting selector;

and one or more input selectors have an image or symbol associated therewith for identifying the function and/or operation corresponding thereto.

However, a controller for a user interface having one or more input selectors having a temperature/fabric setting selector image or symbol for identifying the function and/or operation of a pressing iron is known in the art. Wellcome, for example, teaches a display panel (6) comprising multiple input selection buttons (7), each button corresponding to a particular temperature of the iron (1) as well as fabric types suitable for each temperature and conventional dot markings used on conventional iron temperatures controls (page 1, lines 77-92). The advantage of such a configuration provides the user indication marks that coincide with fabric types/temperatures, thereby allowing the user to readily and easily set a temperature according to fabric types. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the input selector of Nakao et al. with a plurality of input selectors and an image/symbol associated to the input selector in order to provide the user indication marks that coincide with fabric types/temperatures, thereby allowing the user to readily and easily set a temperature according to fabric types.

With respect to the limitations of claim 4 and at least one or more input selectors being an LCD panel, Nakao et al. disclose the one or more input selectors (setup key 29/ switch 11 combination; English MAT; page 4, lines 6-11) being at the lower portion of the liquid crystal display (13) panel (see Drawing 1), thereby being part of the LCD panel or an LCD panel. In view of Wellcome, providing multiple input selectors with images associated therewith would only increase the length of the user interface and

therefore would still be at the lower portion of the liquid crystal display (13) panel (see Drawing 1), thereby being part of the LCD panel or an LCD panel. Therefore, the Nakao et al. and the Nakao in view of Wellcome structures fully meet "at least one or more input selectors being an LCD panel" given its broadest reasonable interpretation.

13. Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakao et al. (Japanese Publication No. JP 09164300A) in view of Wellcome (United Kingdom Patent Application No. GB2163574A) as applied to claims 2-4, 6 and 7 above, and further in view of Upadhye et al. (U.S. Publication No. 2003/0074903)

The Nakao-Wellcome combination discloses all of the limitations, as previously set forth, except for the input selectors and output indicators being an LED panel.

However, Upadhye et al. teach that input user interface touchscreen LCD panel or LED panel for a portable heating device being equivalent structures known in the art. Upadhye et al. teach an input device (exemplary input device 76 shown as a keypad may also include a touchscreen) comprising input selectors (touchscreen) being displayed in an LCD or LED display (display indicator 78) depending on the temperature selection (page 3, paragraph 40; see Figure 9). Furthermore, the touchscreen input device (76) being on a LCD or LED display panel structure fully meets an "input selector being an LCD or LED panel" given its broadest reasonable interpretation. Therefore, because these two input selector display panel devices were art recognized equivalents at the time of the invention was made, one of ordinary skill in the art would have found it obvious to utilize an input touchscreen selector on an LCD or LED panel, depending on

system requirements, to provide a lower power consumption device and a higher resolution in the device allowing for a smaller but comfortable display, thereby providing a quality product interaction experience.

14. Claims 18-20, 82 and 83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakao et al. (Japanese Publication No. JP 09164300A) in view of Barnes et al. (U.S. Patent No. 6,255,630).

Nakao et al. disclose all of the limitations of the claimed invention, as previously set forth, except for the digital interface of the controller having a scrolling LCD display suitable for displaying scrolling text.

However, controllers for heating devices comprising a scrolling text LCD display is known in the art, Barnes et al., for example, teach a controller comprising a control panel (28) that has a central LCD display (column 2, lines 47-54). Barnes et al. teach a display common zone (125) that is utilized to display numerous messages in the form of an array of words or phrases and phrases (column 4, lines 32-36; column 4, line 56 – column 5, line 5; column 6, lines 42-46; column 7, lines 6-11, 27-36; column 8, claim 8; column 9, claim 13; column 10, claim 24). Barnes et al. teach that advantage of such a configuration provides information based on ease of use of and convenience, thereby decreasing the operating complexity of the device. It would have been obvious to one of ordinary skill in the art at the time of the invention was to modify Nakao et al. with a scrolling text LCD display in order to provide information based on ease of use of and convenience, thereby decreasing the operating complexity of the device.

With respect to the limitations of claim 19 and the interface being operatively connected with a microprocessor and one or more sensors, a sound generator, and a heater, Nakao et al. explicitly discloses a digital interface having a segmented LCD display (i.e. numeral characters of temperature; see Drawing 2). In addition, Nakao et al. disclose an input selector (setup key 29/ switch 11 combination; English MAT; page 4, lines 6-11). The examiner notes that a digital interface is the electronic handshaking that occurs between various components within a device (i.e. microcontroller and components). Nakao et al. further explicitly disclose a schematic circuit (see Drawing 1) comprising microprocessor (10) operatively connected to a temperature sensor/thermistor (15), buzzer (14) and heater (7). Therefore since the interface of Nakao et al. is digital and comprises a microprocessor (10), sensor/thermistor (15), buzzer (14) and heater (7), Nakao et al. in view Barnes et al. (U.S. Patent No. 6,255,630) fully meets "wherein said interface is operatively connected with a microprocessor and one or more sensors, a sound generator, and a heater" given its broadest reasonable interpretation.

With respect to the limitations of claims 20, 82 and 83 and the digital interface/input selectors being a touch sensitive panel, Nakao et al. explicitly discloses a digital interface having a segmented LCD display (i.e. numeral characters of temperature; see Drawing 2). Nakao et al. further disclose an input selector (setup key 29/ switch 11 combination; English MAT; page 4, lines 6-11). The examiner notes that a digital interface is the electronic handshaking that occurs between various components within a device (i.e. microcontroller and components). Nakao et al. clearly disclose a

touch sensitive panel/user interface having inputs being controlled by microprocessor (10), which displays the input selections in a digital display (liquid crystal display 13).

The interface is inherently digital and the input selector (setup key 29/ switch 11 combination) is further a touch-sensitive panel of the device would not operate when the setup key (29) is touched. Therefore, the Nakao et al. in view of Barnes et al. structure fully meets "and the digital interface selectors being a touch sensitive panel" and "at least one of said one or more input selectors is a touch-sensitive panel" given its broadest reasonable interpretation.

Remarks

15. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the input and the output provided in the cordless iron are not separate and discrete components) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

16. With respect to applicant's argument that Nakao et al. do not disclose a digital display panel for displaying scrolled text and segmented text, the examiner respectfully disagrees. Nakao et al. disclose the liquid crystal display (13) *for displaying set temperature and the temperature level which would be inherently segmented text/numbers*. In addition, it has been held that the recitation that an element is "for" performing a function is not a positive limitation but only requires the claimed structural

limitations and the ability to so perform as such. Nakao et al. clearly disclose a liquid crystal display (13) for displaying set temperature and the temperature level and would *have the ability* to display both scrolled and segmented text/numbers since LCD displays are very interactive and programmable. Therefore since Nakao et al. disclose the structural limitations of a controller (printed circuit board 28; and Drawing 1) and a digital display panel (liquid crystal display [LCD] 13) for displaying segmented text/numbers, Nakao et al. fully meets "a digital display panel for displaying scrolled text and segmented text" given its broadest reasonable interpretation.

17. In response to applicant's argument that the combination of Nakao et al. in view of Wellcome would make Nakao et al. more cumbersome, more expensive and potentially inoperable, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

18. In response to applicant's argument that the Nakao-Wellcome combination in view of Upadhye et al. would result in a cumbersome, more expensive and potentially inoperable device, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would

have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

19. In response to applicant's argument that Barnes et al. is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Barnes et al. is the field of applicant's endeavor and reasonably pertinent to the particular problem with which the applicant was concerned.

Barnes et al. explicitly teach a controller (control panel 28) for a heating device comprising a digital interface including a scrolling text LCD display. Nakao et al. disclose a digital interface: input selector(s) (setup key 29/ switch 11 combination); output indicators (set temperature; temperature level; buzzer 14); microcontroller (10); sensor/thermistor (15); heater (7); and a digital display panel (liquid crystal display [LCD] 13) for displaying scrolled text and segmented text. Clearly both Nakao et al. and Barnes are controlling heaters via a digital interface including both input and output devices.

Furthermore, Barnes et al. teaching of a common zone (125) within the display (LCD) being used to display numerous messages to the user of the heating device, with information being presented on a predetermined priority basis is particular pertinent to the problem applicant is concerned with. Barnes et al. further teach that an array of words and phrases that are displayed provide an ease of use and convenience for use

with respect to status of the device (column 4, lines 31-36, 56-61; column 6, lines 42-46; column 7, lines 6-11, 29-32).

Therefore, the examiner maintains that Barnes is analogous due to both Nakao et al. and Barnes et al. being concerned with a controller controlling a heater via a digital user interface, and due to Barnes et al. further teaching an improvement of a digital interface comprising scrolling text information.

Conclusion

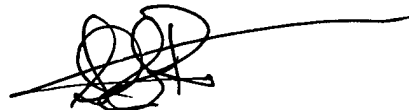
20. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Ralis whose telephone number is 571-272-6227. The examiner can normally be reached on Monday - Friday, 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu Hoang can be reached on 571-272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Stephen J Ralis
Examiner
Art Unit 3742

SJR
January 15, 2008



TU BA HOANG
SUPERVISORY PATENT EXAMINER